incorporated into the assignment of the risk descriptors and then into the interpretation of the results. This report falls short in these critical areas. This section should be revised to not only identify the potential areas of uncertainty, but to also quantify them to the extent possible, eliminate or reduce the uncertainty where possible and finally to present a cohesive interpretation of these uncertainties on the overall conclusions of the risk assessment.

It is not enough to simply state that these uncertainties exist, that overall they are quite conservative and that the risk as presented in the report is likely to overstated. This conservative overestimation of risk, coupled with the existing (and we believe incorrect) risk descriptors provides a misleading perceptive on the actual risk posed by the site to the risk manager and other readers of this document.

EPA RESPONSE: See EPA Response to ITT Comment 198.

208. (RI Table 7-8) Reference should be given for nitrate RfDs.

EPA RESPONSE: It is noted that the HEAST reference for the nitrate RfD has been inadvertently left off Table 7-8.

209. (RI Page 8-1 and 8-5) The chemicals of potential concern selection process does not follow EPA procedures. It is not appropriate to exclude detected chemicals of potential concern if no state or federal MCL is available, or deselect them if their maximum concentration is less than the MCL. All of the compounds qualitatively discussed (antimony, beryllium, nickel, zinc, 2, 4-dimethylphenol and 2-methylphenol) have oral reference doses. In addition, the qualitative discussions are inappropriate and inadequate.

Eliminating COCs from the risk assessment may exclude other potential PRPs and may change the list of possible remedial alternatives.

EPA RESPONSE: The guidance (US EPA, 1989) does allow for the inclusion and exclusion of compounds based on factors such as, magnitude, toxicity, mobility, persistence, frequency, etc. This process allows the quantitative risk assessment to focus on the compounds of primary concern. The compounds that were excluded or only considered qualitatively were not deemed to significantly contribute to the potential risks at the site.

210. (RI Page 8-2) A conceptual model for the South Plume OU has not been provided. A conceptual model identifies all potential or suspected sources of contamination, types and concentrations of contaminants detected at the site, potentially contaminated media, and potential exposure pathways including receptors RAGS 4-5.

EPA RESPONSE: The use of the box model to estimate exposure point concentrations although conservative is consistent with USEPA guidance (EPA Risk Assessment Guidance for Superfund Sites and EPA Exposure Factors Handbook [1989]). It should be noted that alternate model calculations would not be expected to result in risk estimates below the guidance benchmark of $1x10^{-6}$, given the elevated concentrations in the groundwater at the site.

211. (RI Page 8-4) Potential future exposures to chemicals in the lower zone were estimated based on groundwater data from three (3) samples. This is not sufficient data to characterize the lower zone of the South Plume OU, nor is it appropriate with only 3 sample locations.

EPA RESPONSE: The extent of data collected for groundwater was deemed adequate to define the plume and was deemed of sufficient quality for use in this RA, as per USEPA guidance on data usability, (USEPA, 1990).

212. (RI Page 8-4) The procedures used to calculate the arithmetic means and 95% upper confidence limits are not provided. It is not possible to determine the validity of these estimated concentrations.

EPA RESPONSE: See EPA Response to ITT Comment 5 (Reference: Anderson, D.R., Sweeney, D.J., and Williams, T.A., 1981. Introduction to Statistics: An Applications Approach, West Publishing Company, St. Paul, Minnesota.)

213. (RI Section 8.3.3) The meaning of the specific exposure parameter estimated in this document is unclear. Does the mean and UCL represent the overall average concentration in the entire plume at this point in time, the peak concentrations in the center of the plume, the maximum concentration that will ever develop in the plume, or some other quantity? This needs to be defined. Once it is defined, and the relationship between each well and each plume and the manner in which data from each well is to be used to derive a mean and UCL concentration for the plume are specified, it will be possible to evaluate the validity of the mean and UCL generated for this assessment.

A much more detailed description of the relationship between well locations, the selection of wells for inclusion in concentration estimation, any weighing of wells based on location within the plume, the relative importance of the time interval over which samples were collected, and the origin of the number of samples "n" presented in Table 8-4, as required, before it would be possible to interpret the validity of the approach employed to derive "representative" concentrations and conservative upper bounds to such concentrations. What is needed is a detailed description of what the estimated concentrations are intended to represent (i.e., estimates of average concentrations within the entire plume out to some pre-defined concentration isopleth?) No

matter what the definition of what is being estimated, there needs to be a clear description of what is being estimated, there needs to be a clear description of why the procedure was selected to provide a mean and UCL that is representative of the quantity to be estimated.

EPA RESPONSE: Sections 8.3.1, 8.3.2, and 8.3.3 detail the methodology and rationale used to calculate the exposure concentrations used in the risk estimates. Further detail is presented in preceding sections of the document (Sections 7.3, 4.0, and 2.0). It is noted in the text (p.8-3) the time period of sampling for the data used in the risk assessment database. The extent of data collected for groundwater was deemed adequate to define the plume.

214. (RI; Table 8-4) It is not clear what the number of values, n, is. Upon comparison with Table 5-3, Summary of Preliminary Screening of all Detected Compounds in Groundwater in the Upper Zone, neither the number of wells with detects nor number of wells analyzed for compounds match n. It is not clear what values were used to determine chemical arithmetic means or upper bound 95% C.I.

EPA RESPONSE: Table 8-4 is a subset of Table 5-3 with a variety of factors influencing the final ":n" selection for Table 8-4. These factors include elimination of duplicates, exclusion of wells due to location, etc. The explanation of the number of values (n) is provided on page 8-4 of the text.

215. (RI; Tables 8-6 and 8-7) It is not clear what is meant by the tables labeled "Carcinogenic Potency of the... Plume." Generally, one estimates carcinogenic potency at the point of exposure of some exposure pathway, not for an entire plume. One also needs to take into account the frequency and duration of exposure.

EPA RESPONSE: The terms noncarcinogenic and carcinogenic potency refer to the toxicity values found in the tables. The terms "for the Glendale South Plume OU" refer to the location of the wells in which these compounds were detected.

216. (FS Page 8-5) Cross-assigning inhalation and ingestion RfDs adds uncertainty to the estimation of risks. Other references for health effects criteria should be used, where values are not provided or are pending in IRIS, e.g., an ingestion RfD of 6×10^{-3} (mg/kg-day) for TCE could be used from the USEPA Environmental Criteria and Assessment Office (August, 1992). Use of cross-assigned RfDs may overestimate Hazard Indices, resulting in an unnecessarily conservative health risk estimation.

EPA RESPONSE: The cross-assignment for reference doses for COCs was intended to provide "quantitative" information to the risk manager with regard to compounds without defined toxicity values. The uncertainty of this assignment is duly noted in the

uncertainties Section 8.6.2, page 8-16, point 5 and is considered in the risk evaluation section with regard to the public health significance of the risk estimates presented in this document. The method mentioned in the comments was not available at the time this document was prepared.

217. (RI Page 8-8) Risk have only been estimated for potential adult residents. It has not been clearly explained why other potential receptors, e.g., child residents or workers were excluded from evaluation. Total estimated noncarcinogenic risks (hazard indices) to child receptors may be greater than those estimated for adult residents.

EPA RESPONSE: It was not deemed necessary to compute risk estimates for potential receptors other than those presented in the text. Initial review of the data collected indicated the primary pathway of concern to be groundwater. Therefore, the exposure assessment focused on the identification and characterization (quantitative and qualitative) of potential risk via this pathway. It was performed in accordance with USEPA 1989 guidelines (USEPA, 1989) and the USEPA Region IX recommendations (USEPA, 1989) and deemed appropriate for adequate risk characterization by state regulators as well.

218. (RI Page 8-8) Total risk from exposure to the upper zone and lower zones were estimated separately. Therefore, it should be clarified that residents are expected to be exposed to only one source. Otherwise, they are assumed to be exposed to both zones and total risks will be at some value between the risks estimated for the upper and lower zones.

EPA RESPONSE: The current use of groundwater in the SFV is from the Lower Zone of the aquifer; however, there is potential for future use of the Upper Zone where the most of the contaminant mass is located. Thus, both zones were considered quantitatively in the risk assessment. The description of current and future water use for the Glendale Study Area (Section 2.0, Section 7.3, and 8.3) indicates that use of the groundwater may be from the Upper or Lower Zone.

219. (RI; Table 8-8) It is generally not health-protective to assume that exposure occur in isolation from one another. Summary tables for total (e.g., multipathway) estimated carcinogenic and noncarcinogenic risks to the potential receptor populations should provide cumulative totals.

EPA RESPONSE: This comment is noted, however, the tables are arranged such that simple addition of risk numbers for each of the individual scenarios can be computed to provide a total risk estimate.

220. (RI Page 8-9) In the South Plume FS, benzene and methylene chloride were not included in the summary of all detected

constituents in the South Plume Zone (Table 1.2-1); however, they were included in the summary table in the RI (Table 5-3). Benzene and methylene chloride were major contributors to both the cancer and non-cancer health risk estimates in the RI South Plume Risk Assessment, yet were inexplicably eliminated from the FS.

EPA RESPONSE: Table 1.2-1 does identify all detected constituents in the Upper Zone RI wells for the South OU. The Upper Zone RI wells are wells that were installed as part of the regional-scale RI that was conducted to characterize the nature and extent of contamination in the San Fernando Basin. Wells located on specific industrial sites were also used to characterize the nature and extent of groundwater contamination in the South OU area; the constituents detected in these wells are listed in Tables 4-13, 4-16, and 4-19 of the Glendale Study Area RI. Benzene, methylene chloride, toluene, ethyl benzene, vinyl chloride, and xylene were detected in wells located on specific industrial sites. Data from these wells were used in the baseline risk assessment for the South OU, included in the RI report for the Glendale Study Area.

221. (RI Page 8-11) Inorganic arsenic is naturally occurring; however, it is inappropriate to eliminate arsenic from consideration without comparison to site specific background concentrations. A range of background arsenic concentrations has not been provided in the risk assessment. Arsenic contributes more to the cancer risk associated with exposure to groundwater than either TCE or PCE.

EPA RESPONSE: The low frequency of detection and magnitude of concentration detected is duly noted for arsenic in the risk evaluation and its significance with regard to remediation is noted as well (p. 8-11). Background levels of arsenic in groundwater are not provided. The SFV is a highly developed and industrialized area, thus the ascertainment of background samples was difficult. This RI is part of a larger regional assessment for the entire basin, thereby making upgradient sampling difficult to determine.

222. (RI Page 8-17) Since exposures to radon via inhalation are a primary concern, and inhalation while showering has been identified as a complete exposure pathway, there is potential for adverse health effects by radon. Radon, however, is a naturally occurring substance; it is not generated by industrial sources. EPA now has information which allows estimation of health risks posed by radon in a manner similar to that done for chemicals. A formal risk assessment can be conducted to evaluate the health risks posed by radon.

EPA RESPONSE: The major focus of this risk assessment was to evaluate site related risks to human health and the environment. At the time of preparation of this document, it was deemed appropriate to qualitatively evaluate the radionuclide data collected at the site. This provided a risk perspective for the environmental manager and would not inappropriately focus

remediation decision-making upon a probable natural constituent, not generated by industrial sources.

APPENDIX A

SAN FERNANDO VALLEY INFORMATION REPOSITORIES

Copies of the Remedial Investigation Report for the Glendale Study Area (January 1992), the Feasibility Study for the Glendale Study Area North Plume Operable Unit (April 1992), the Proposed Plan for the Glendale North OU (July 1992), the Glendale North and South OU Administrative Record Files (on microfilm) and other documents pertaining to the San Fernando Valley Superfund sites are available for public review at the following five locations. If the copies of documents are not available, contact Fraser Felter, Community Relations Coordinator, at (415) 744-2181. Please note that the Glendale North and Glendale South OU Administrative Record Files are also available at EPA Region 9 Superfund Record Center, 75 Hawthorne Street, 9th Floor, in San Francisco (415-744-2165).

City of Glendale Public Library
222 East Harvard Street
Glendale, CA 91205
(818) 548-2021
Contact: Lois Brown

Hours: M-Th 10:00 am - 8:55 pm
F-Sat 10:00 am - 5:55 pm

Los Angeles Department of Water and Power (LADWP) Library
111 North Hope Street, Room 518
Los Angeles, CA 90012
(213) 481-4612
Contact: Joyce Purcell

Hours: M-F 7:30 am - 5:30 pm

City of Burbank Public Library
110 North Glenoaks Boulevard
Burbank, CA 91502
(818) 953-9741
Contact: Andrea Anzalone

Hours: M-Th 9:30 am - 9:00 pm
F 9:30 am - 6:00 pm
Sat 10:00 am - 6:00 pm

California State University Northridge Library
18111 Nordhoff Street
Northridge, CA 91330
(818) 885-2285
Contact: Mary Finley

Hours: W, Th 8:00 am - 10:00 pm
M, T, F 8:00 am - 5:00 pm

The University Research Library/U.C.L.A.
Public Affairs Service
405 Hilgard Avenue
Los Angeles, CA 90024
(310) 825-3135
Contact: Barbara Silvernail

Hours: M-Th 10:00 am - 7:00 pm
F 10:00 am - 5:00 pm
Sat, Sun 1:00 pm - 5:00 pm

2166-05364

RESPONSIVENESS SUMMARY

for PUBLIC COMMENTS RECEIVED from

July 6, 1992 through September 8, 1992

ON THE PROPOSED PLAN FOR THE

GLENDALE NORTH OPERABLE UNIT INTERIM REMEDIAL ACTION

AT THE SAN FERNANDO VALLEY SUPERFUND SITE,

LOS ANGELES COUNTY, CALIFORNIA

This document summarizes and responds to all significant written comments received during the sixty day public comment period on EPA's Proposed Plan for the Glendale North Operable Unit (OU) of the San Fernando Valley Superfund Site in Los Angeles County, California. This summary is divided into two parts. Part I provides a summary of the major issues raised by commenters representing the local community and EPA's responses to these comments and concerns. Part II is a detailed response to comments received that were of a more technical or legal nature. A copy of all of the comments received is included in the Administrative Record File available for public review at the five information repositories for the San Fernando Valley Superfund sites listed in Appendix A.

RESPONSIVENESS SUMMARY - PART I

GENERAL COMMENTS FROM MEMBERS OF THE LOCAL COMMUNITY

1. One commenter wanted to know if extracting 3000 gallons per minute (gpm) from the groundwater without replenishment would lead to subsidence, land cracks and sink holes.

EPA Response: For several reasons, EPA does not believe that the interim remedy will result in subsidence for several reasons. First, there is no documented evidence of subsidence in the San Fernando Valley Groundwater Basin having occurred as a result of groundwater extraction even during years in which groundwater extraction resulted in a 200 foot lowering of the water table. In the alternative presented in EPA's Proposed Plan for the Glendale North OU, the lowering of the water table would be less than 15 feet. Because there was no subsidence as a result of the greater piezometric surface lowering observed in the past, it is unlikely that a drawdown of an order of magnitude less would induce subsidence.

In addition, finer-grained sediments, such as clays found in the Santa Clara and San Joaquin Valleys where groundwater extraction has been shown to induce subsidence, are the most susceptible to subsidence. In the San Fernando Valley, the sediments are generally coarse-grained and are thus not likely to consolidate even with water table lowering.

Finally, in 1979, the rights and obligations of the parties that have rights to water in the San Fernando Valley Groundwater Basin were adjudicated. The Court judgment in the case, referred to as the Upper Los Angeles River Area (ULARA) Judgment, provides that the basin be operated under safe yield conditions and that the operation of the basin be supervised by a Watermaster and an Administrative Committee (which includes the San Fernando Valley water purveyors). By operating the basin under safe-yield conditions, the groundwater level in the basin will remain, on average, the same. The ULARA Watermaster has developed specific policies on groundwater extraction for remediation purposes that require compliance with this judgment-specified safe-yield operation. As a result, the City of Glendale, which is one of the parties to have groundwater extraction rights under the 1979 judgement would be required to replenish the 3,000 gpm extracted by the Glendale North Plume OU. This could be accomplished by not extracting elsewhere, using stored water credits that have accumulated or by replenishing the basin with an amount of water equal to that of the extracted groundwater.

2. Two commenters stated that the extracted and treated water should not be put into the public water supply, regardless of the treatment method used and that ideally, the extracted, treated water should be used for the same purposes as other "reclaimed" water, such as watering public landscaping, public fountains, etc. (with any excess being reinjected). In their opinion, this would still put the water to use without exposing humans to any remaining contamination the water may carry. Further, the commenters stated that discharge of the extracted, treated water to the Los Angeles River alternative would be wasteful and suggested that EPA eliminate this alternative from further consideration.

EPA Response: First, it is important to emphasize that the extracted groundwater that will be treated by the Glendale North OU will, at a minimum, meet all State and Federal drinking water standards. These standards represent the levels at which long-term human exposure is unlikely to cause significant health effects. It is therefore of superior quality and not comparable to typical "reclaimed water" which is usually sewage water which has been treated to reduce the organic matter and then chlorinated or filtered to reduce bacteria levels. Reclaimed water does not necessarily meet drinking water standards while the water treated by the Glendale North OU will meet or exceed those standards at all times and be safe to drink.

In addition, the amount of reclaimed water that can be reused is limited by the amount of demand and by the high cost of installing pipelines and pumps to convey the water from where it is generated to where it can be used. The City of Glendale's total annual water demand is approximately 32,000 acre-feet per year (AFY); about 60 percent is used for residential purposes, 30 percent for commercial/industrial uses (both potable and non-potable), and 10 percent for fire fighting, hydrant flushing, etc. The City of Glendale currently uses about 300 AFY of reclaimed wastewater and expects to expand that use up to 3,000 AFY (about 10% of the City's total water demand) over the next five years. The Los Angeles-Glendale Water Reclamation Plant produces approximately 20,000 AFY of reclaimed wastewater, most of which (85%) is currently discharged into the Los Angeles River and flows to the Pacific Ocean, and about half of which (10,000 AFY) Glendale is entitled to use for reclamation purposes.

The 3,000 gpm of treated groundwater expected from the Glendale North OU is equivalent to approximately 4,850 AFY of available water supply. Even if reclaimed wastewater were not used at all to serve irrigation/reclamation needs in the City, the amount of water produced by the OU facility would still exceed the amount currently needed for reclaimed/non-potable uses. Thus, using the treated water from the OU facility to serve irrigation/reclamation uses could adversely affect current wastewater reclamation programs and proposed expansions of those programs.

To learn more about local reclamation programs and plans, please contact Mr. Don Froelich, Water Services Administrator for the City of Glendale's Public Service Department, at (818) 548-2137.

3. One commenter stated that is important to note that the perozone process does not remove VOCs from groundwater but merely adds other chemicals to the water to oxidize the VOCs into harmless compounds and that the perozone process should be removed from further consideration as a means of treatment. The commenter also stated that the perozone treatment produces harmful disinfection by-products that will be regulated in the future.

EPA Response: For the reasons described in the response to Comments 7 and 10 below, EPA has not selected perozone treatment. Nevertheless, we note that perozone oxidation involves the addition of ozone and hydrogen peroxide to generate hydroxyl radicals ($OH\cdot$) in sufficient quantity to provide the desired level of oxidation of targeted pollutants. To date, very few by-products of the perozone oxidation treatment process have been identified to cause health concerns. Most of the by-products that have been identified (e.g., formaldehyde) and nonspecific by-products (e.g., assimilable organic carbon [AOC]) are, for the most part, biologically degradable. These by-products can be effectively removed by a

biological filter (sand, anthracite, or liquid GAC filter). The perozone alternatives described in the Glendale North OU feasibility study report and the Proposed Plan always included a final polishing by liquid GAC or air stripping but do not include any filtering by sand or anthracite. Liquid GAC polishing used after the perozone process to remove any remaining VOCs (such as carbon tetrachloride) in the water, it would also remove any of the by-products resulting from the oxidation process. Perozone followed by air stripping may not be as effective at addressing all potential by-products.

4. A commenter suggested that EPA consider processes other than vapor phase GAC, such as ultraviolet radiation, to meet air emissions standards for VOCs.

EPA Response: Oxidation of VOCs (e.g. ultraviolet radiation), in the vapor phase is an emerging technology for treating VOC off-gases from air stripping applications. EPA did evaluate the potential use of this new technology in the feasibility study for the Glendale North OU. However, the technology was eliminated from further consideration during the initial screening of technologies for a number of reasons. The effectiveness of using ultraviolet (UV) radiation to oxidize contaminants in the gas phase depends on the contaminants present; for instance, TCE, PCE, and dichloroethylene (DCE) are treatable, but carbon tetrachloride is not as easily treated. Carbon tetrachloride was detected in the groundwater of the Glendale North OU study area during the remedial investigation. Thus, the UV oxidation technology has limited application to the Glendale North OU because contaminants such as carbon tetrachloride which cannot be effectively treated using this technology are present in the groundwater. Also, as stated in the feasibility study report for the Glendale North OU, as with liquid phase advanced oxidation processes, incomplete oxidation can lead to the formation of intermediates such as acetone or nontoxic organic acids which would also need to be addressed. In addition, costs associated with UV oxidation are higher than those associated with vapor phase GAC. Finally, EPA determined that the while vapor phase advanced oxidation processes such as UV oxidation have been shown to be effective in treating a variety of VOCs in limited field studies, further study would be required to determine the long-term cost effectiveness of using such technologies.

5. The commenter stated that air stripping is a proven, reliable, and cost-effective process for volatile organic compounds (VOCs) removal.

EPA Response: EPA agrees with this comment. This commonly used technology is well proven for the removal of VOCs from contaminated groundwater. Removal efficiencies of greater than 99 percent can be achieved by a properly designed packed-tower air stripper.

6. A commenter stated that, to the best of his knowledge, ion exchange has not been used at a full-scale treatment facility to remove VOCs.

EPA Response: Ion exchange was proposed as a technology for the treatment of nitrate only, not VOCs. Ion exchange was evaluated as an alternative to blending in order to meet the nitrate drinking water standard (maximum contaminant level). Ion exchange or blending to meet the nitrate drinking water standard would be performed after the extracted water is treated for VOCs.

7. A commenter stated that no full-scale installations of perozone oxidation have been developed.

EPA Response: Upon researching this comment in greater detail, EPA found that it was not entirely accurate. Ozone was first used in France for water treatment more than 80 years ago and has been applied in more than 2,000 plants worldwide. One of the major advantages of perozone oxidation is that perozone can destroy or oxidize contaminants such as trichloroethylene (TCE) and tetrachloroethylene (PCE). Examples of recent applications of perozone oxidation include:

- **City of Los Angeles, California.** The Los Angeles Department of Water and Power (LADWP) is currently operating a 3 million-gallon per day (mgd) demonstration plant in North Hollywood that uses perozone oxidation to treat TCE and PCE. This demonstration project should provide some useful information regarding the effectiveness of perozone at treating VOC-contaminated groundwater at high flow rates.

- **City of Rouen La Chapelle, France.** The City's water utility uses perozone oxidation and granular activated carbon (GAC) filtration to treat contaminated groundwater at a maximum rate of 13 mgd. Contaminants include TCE, carbon tetrachloride, PCE, isoalkane, trichloroethane, and many others.

While EPA was able to determine that perozone has been used for some larger-scale projects, the contaminants involved were not always similar to those found in the groundwater of the Glendale North OU study area. Therefore, use of perozone for the Glendale North OU would be one of the largest VOC treatment applications of the technology. This fact, coupled with the uncertainties associated with design, uncertainties with regard to capital and operational costs, reliability, and finally the fact that a municipality will be counting on receiving this water, all combined to make air stripping or liquid GAC preferable to VOC treatment by perozone oxidation for the Glendale North OU.

8. A commenter stated that liquid phase GAC is operationally less reliable than air stripping because adsorbed organic material on the GAC media will encourage the growth of microorganisms and thus interfere with water quality maintenance in the water distribution.

EPA Response: Liquid phase GAC is a proven technology that can remove a broad spectrum of organic contaminants. Full-scale applications of GAC treatment of contaminated groundwater have shown minimal operational difficulties from microbial growth at the flow rates similar to that proposed for this project. In addition, potential microbial growth should not be a problem because disinfection (chlorination) of the water is conducted prior to its distribution through a public water supply system.

9. EPA received a number of comments regarding the City of Glendale's suggestion to use water from a lower aquifer for blending to meet the nitrate MCL. Specifically, several commenters expressed concern that extracting water from the lower aquifer could result in the spreading of contamination into the lower aquifer.

EPA Response: If the final use of the treated water is to convey it to a public water distribution system such as the City of Glendale's, then the water must meet all drinking water standards, including that for nitrate. While EPA strongly suggests that the source of water for blending to meet the nitrate drinking water standard (MCL) be from the Metropolitan Water District (MWD), it will not be required by EPA at this time. Therefore, the City may choose to explore other possible sources of the water to be used for blending such as using the water from a lower aquifer where there is no contamination. However, if EPA determines that using such water will result in the further release (migration of contamination into clean areas) or result in even a threat of such a release, EPA could use its CERCLA enforcement authorities to address this release or threat of release by prohibiting pumping from the lower aquifer. In addition, EPA has some concerns regarding the quality of water in the lower zones of the aquifer and its suitability for blending. The water that will be used for blending to meet the nitrate MCL must be of a quality such that the resulting water from the blending facility would meet all drinking water standards. Finally, State agencies, including the California Regional Water Quality Control Board have expressed concern with this approach due to its potential to violate State anti-degradation policies.

Therefore, due to the questions surrounding lower zone water quality and the potential for further migration of the contamination, both of which could potentially halt the Glendale North OU project, EPA continues to support the use of MWD water for blending to meet the nitrate drinking water standard.